

REMARKS / ARGUMENTS

Claims 2 – 3, 5 – 6, 8 – 9, 11 – 12, 14 – 15 and 17 – 18 are pending in this application and are presented for reconsideration in view of the foregoing amendments and the following remarks. Claims 1, 4, 7, 10, 13 and 16 have been canceled.

In the outstanding Office Action the Examiner indicated that claims 5 – 6, 11 – 12 and 17 – 18 would be allowable if rewritten to overcome rejections under 35 U.S.C. §112, second paragraph, and to include the limitations of the base claim and any intervening claims; the Examiner rejected claims 1 – 18 under 35 U.S.C. §112, second paragraph as being indefinite; rejected claims 1, 7 and 13 under 35 U.S.C. §103(a) as being unpatentable over Australian Publication No. AU 9952594 to Browne et al. (hereinafter referred to as “the Browne et al. ‘594 reference”); rejected claims 2, 8 and 14 under 35 U.S.C. §103(a) as being unpatentable over the Browne et al. ‘594 reference in view of U.S. Patent No. 6,621,941 to Syeda-Mahmood et al. (hereinafter referred to as “the Syeda et al. ‘941 patent”); rejected claims 3, 9 and 15 under 35 U.S.C. §103(a) as being unpatentable over the Browne et al. ‘594 reference in view of a publication by Karl Sims titled “Artificial Evolution for Computer Graphics” (hereinafter referred to as “the Sims publication”); and rejected claims 4, 10 and 16 under 35 U.S.C. §103(a) as being unpatentable over the Browne ‘594 reference in view of the Syeda et al. ‘941 patent and further in view of the Sims publication.

By this Response and Amendment,

claims 2 and 5 have been amended to recite the features of canceled claim 1 and claim 3 has been amended to depend from claim 2;

claims 8 and 11 have been amended to recite the features of canceled claim 7 and claim 9 has been amended to depend from claim 8;

claims 12 and 18 have been amended to recite “the *parent* feature parameter *including...*”

claims 14 and 17 have been amended to recite the features of canceled claim 13 and claim 15 has been amended to depend from claim 14;

claims 1, 4, 7, 10, 13 and 16 have been canceled;

claims 5, 11 and 17, which were indicated as being allowable; and

claims 5, 11 and 17 have been amended to overcome the rejections under 35 U.S.C. §112, second paragraph and to include the features of their base claims and intervening claims, specifically, claims 11 – 12 and 17 – 18 have been amended to recite “parent feature parameters” and “new parent feature parameters;” and

Support for the addition of the “parent feature parameter” language to claims 8, 11, 12, 14, 17 and 18 can be found on page 27, lines 1 – 21 of the originally filed application. Therefore, it is respectfully submitted that the within amendments introduce no new matter within the meaning of 35 U.S.C. §132.

Rejections Under 35 U.S.C. § 112, Second Paragraph

1. Claims 1, 7 and 13 – “*Expressing*”

The Examiner rejected claims 1, 7 and 13 as being indefinite asserting that the term, “expressing” in claims 1, 7 and 13 is relative, which renders the claim indefinite; and suggested replacing “expressing” with “representing.” The Examiner rejected claims 2 – 6, 8 – 12 and 14 – 18 for failing to correct the deficiencies of their parent claims.

Response

By this Response and Amendment, claims 1, 7, and 13 have been canceled, which renders the rejections thereto moot.

Claims 2 and 5, which incorporate the features of claim 1, claims 8 and 11, which incorporate the features of claim 7, and claims 14 and 17, which incorporate the features of claim 13, recite the phrase – representing a feature of the font character – as suggested by the Examiner, rather than “*expressing* a feature of the font character.” Therefore, the rejections applicable to the independent claims on which claims 2 – 3, 5 – 6, 8 – 9, 11 – 12, 14 – 15 and 17 – 18 formerly depended are not applicable to the remaining pending claims.

Accordingly, Applicant respectfully requests that the rejections to claims 2 – 3, 5 – 6, 8 – 9, 11 – 12, 14 – 15 and 17 – 18 under 35 U.S.C. §112, second paragraph be withdrawn.

2. Claims 1, 7 and 13 – “*Feature Parameter*”

The Examiner rejected claims 1, 7 and 13 asserting that the phrase, “the feature parameter” in the second to last and last clauses of the claims is confusing as “the feature parameter” could be either user-inputted or generated by the genetic algorithm section. The Examiner rejected claims 2 – 6, 8 – 12 and 14 – 18 for failing to correct the deficiencies of their parent claims.

Response

By this Response and Amendment, claims 1, 4, 7, 10, 13, and 16 have been canceled, which renders the rejections thereto moot.

Claims 2 and 5, which incorporate the features of claim 1, recite the phrases, “a basic font storage section storing a font character of a basic font; ...a feature parameter *representing* a feature of the font character” in the second and third clauses of claims 2 and 5 and, “the genetic algorithm processing section *determines the plural new feature parameters...*” in the third to last clause of the claim. Applicant notes that the phrases: “feature parameter” and “plural new feature parameters,” recited in each of claims 2 and 5, are distinct features. The phrase “feature parameter” refers to a

feature of a *basic* font character, while the phrase “plural new feature parameters” refers to characteristics of a font that are generated by the genetic algorithm processing section of the presently claimed invention. As such, the language of claims 2 and 5 sufficiently differentiates between “feature parameters” and “plural new feature parameters,” which are generated by the genetic algorithm section, thereby eliminating confusion between the terms: “feature parameters” and “plural new feature parameters.”

Claims 8, 11, 17 and 18 each recite a process that includes a loop used to iteratively generate a preferred new font character. The phrase “parent feature parameter,” common to each of claims 8, 11, 17 and 18, refers to characteristics of a basic font, which represents the beginning of a processes loop, while the phrase “new parent feature parameter,” also common to each of claims 8, 11 17 and 18, refers to characteristics of a font that is generated in accordance with a user’s preferences. As the loop is repeated, a more preferred font is created. As such, the language of claims 8, 11, 17, and 18 sufficiently differentiates between “parent feature parameters” and “new parent feature parameters.”

Accordingly, Applicant respectfully requests that the rejections to claims 2 – 3, 5 – 6, 8 – 9, 11 – 12, 14 – 15 and 17 – 18 under 35 U.S.C. §112, second paragraph be withdrawn.

3. Claims 1, 7 and 13 – Omission of Essential Elements

The Examiner rejected claims 1, 7 and 13 asserting that these claims omit essential elements such as a user input section and a feature parameter setting section. The Examiner rejected claims 3, 5, 9, 11, 15 and 17 for failing to correct the deficiencies of their parent claims.

Response

By this Response and Amendment, claims 1, 4, 7, 9, 10, 13 and 16 have been canceled thereby rendering the rejections thereto moot. With respect to the rejections of claims 3, 5, 9, 11, 15 and 17, Applicant respectfully traverses the Examiner's rejection.

The Examiner cites §2172.01 of the *Manual of Patent Examining Procedure* (MPEP) in support of his assertion that the rejected claims omit essential elements. Section 2172.01 of the MPEP states that “a claim which fails to interrelate essential elements of the invention *as defined by applicant(s) in the specification* may be rejected under 35 U.S.C. §112, second paragraph. *MPEP* §2172.01, *emphasis added*. Applicant asserts that the Examiner has not shown where the Applicant has disclosed *in the specification* that “a user input section” or a “feature parameter setting section” are essential elements. The “input unit 1” disclosed in the specification is part of an *embodiment* of the invention but is not disclosed as a feature *essential* to practice all embodiments of the invention. Therefore, with respect to claims 3, 5, 9, 11, 15 and 17, neither a “user input section” nor a “feature parameter setting section” are essential.

Accordingly, Applicant respectfully requests that the rejections to claims 3, 5, 9, 11, 15 and 17 under 35 U.S.C. §112, second paragraph be withdrawn.

4. Claims 3 – 4, 9 – 10 and 15 – 16 – Antecedent Basis for “Feature Parameters”

The Examiner asserted that dependent claims 3 – 4, 9 – 10 and 15 – 16 do not provide sufficient antecedent basis for the phrase, “the feature parameters.” The Examiner rejected claims 5 – 6, 11 – 12, and 17 – 18 for failing to correct the deficiencies of their parent claims.

Response

By this Response and Amendment, claims 4, 10 and 16 have been canceled thereby rendering the rejections thereto moot.

By this Response and Amendment, claims 3, 9 and 15 have been amended to recite: “performing genetic algorithm processing including crossover and mutation on two feature parameters selected from the feature parameter” Thus, Applicant submits that antecedent basis is properly provided for all terms recited in the claims of the present application, particularly, as the phrase “two of the feature parameters” is introduced for the first time in each of claims 3, 9 and 15.

Accordingly, Applicant respectfully requests that the rejections to claims 3, 5 – 6, 9, 11 – 12, 15 and 17 – 18 under 35 U.S.C. §112, second paragraph be withdrawn.

5. Claims 3 – 4, 9 – 10 and 15 – 16 – “Two of the Feature Parameters”

The Examiner asserted that claims 3 – 4, 9 – 10 and 15 – 16 do not sufficiently recite “how the genetic algorithm processing obtains ‘two of the feature parameters selected from the feature parameter’.” The Examiner questioned what kind of processing occurs for two parameters to be obtained from one. The Examiner rejected claims 5 – 6, 11 – 12 and 17 – 18 as not correcting the deficiencies of their parent claims.

Response

Claims 4, 10 and 16 have been canceled thereby rendering the rejections thereto moot.

By this Response and Amendment, claims 3, 9 and 15 have been amended to recite: “performing genetic algorithm processing including crossover and mutation on two feature parameters selected from the feature parameter.” As each of claims 3, 9 and 15 recite “two feature parameters selected from the feature parameter,” Applicant submits that the two feature parameters

are not generated from one feature parameter as the Examiner intuit. Rather, two feature parameters are simply *selected* from the feature parameter that was first introduced in each of the respective independent claims from which amended dependent claims 3, 9 and 15 depend.

Accordingly, Applicant respectfully requests that the rejections to claims 3, 5 - 6, 9, 11 – 12, 15 and 17 – 18 under 35 U.S.C. §112, second paragraph be withdrawn.

Rejections Under 35 U.S.C. § 103

1. Claims 1, 7 and 13

The Examiner rejected claims 1, 7 and 13 as being unpatentable over the Browne et al. '594 reference.

Response

By this Response and Amendment, claims 1, 7 and 13 have been canceled, which renders the rejections thereto moot. However, claims 2, 8 and 14, which include the features of claims 1, 7 and 13, respectively, are currently pending.

Independent claim 2 recites “[a]n apparatus for font generation comprising: a basic font storage section storing a font character of a basic font for generating a font character; a feature parameter storage section storing a feature parameter representing a feature of the font character; a genetic algorithm processing section configured to generate plural new feature parameters by performing genetic algorithm processing on the feature parameter; a font generation section configured to generate new font characters by deforming the font character of the basic font based on the plural new feature parameters generated in the genetic algorithm processing section; a display unit displaying the new font characters generated in the font generation section; an input unit scanning a character handwritten by the user; and a character

features extraction section configured to recognize a character from character data scanned by the input unit, to compare the recognized character and the font character of the basic font, and to extract a feature of the handwritten character as the feature parameter wherein the genetic algorithm processing section determines the plural new feature parameters according to the preferences of a user based on a font character selected by the user from among the new font characters displayed on the display unit, the font generation section creates a font based on the plural new feature parameters according to the preferences of the user determined by the genetic algorithm processing section.

Independent claim 8 recites “[a] computer readable storage medium recording a program for font generation, the program executing in a font generation apparatus, the program comprising: generating plural new feature parameters by performing genetic algorithm processing on a parent feature parameter representing the feature of a font character; generating new font characters by deforming a font character of a basic font for generating a font character based on the plural new feature parameters; displaying the new font characters on a display unit; determining a new parent feature parameter according to the preferences of a user based on a font character selected by the user from among the new font characters displayed on the display unit; and creating a font based on the new parent feature parameter according to the preferences of the user, scanning a character handwritten by the user with an input unit; and recognizing a character from character data scanned by the input unit; comparing the recognized character and the font character of the basic font, and extracting a feature of the handwritten character as the feature parameter.”

And, independent claim 14 recites: “[a] method for font generation in an apparatus for font generation, the method comprising: generating plural new feature parameters by performing genetic algorithm processing on a parent feature parameter representing a feature of a

font character; generating new font characters by deforming a font character of a basic font for generating a font character based on the plural new feature parameters: displaying the new font characters on a display unit: determining a new parent feature parameter according to the preferences of a user based on a font character selected by the user from among the new font characters displayed on the display unit; creating a font based on the new parent feature parameter according to the preferences of the user; scanning a character handwritten by the user with an input unit; and recognizing a character from character data scanned by the input unit; comparing the recognized character and the font character of the basic font, and extracting a feature of the handwritten character as the feature parameter.”

The Browne et al. ‘594 reference discloses a method of generating various new fonts by modifying an *existing* font in consideration of a user’s preferences. The method disclosed in the Browne et al. ‘594 reference alters an existing font based on a user’s identification of the portions of a font that are more aesthetically pleasing, i.e. a font’s color, outline, relative size, etc.

In contrast to the presently claimed invention, the Browne et al. ‘594 reference fails to disclose, teach, or suggest “an input unit scanning a character *handwritten* by the user “ as recited in independent claim 2, or a step of “scanning a character *handwritten* by the user with an input unit,” as recited in independent claims 8 and 10. The Browne et al. ‘594 reference does not go beyond altering an existing font. Thus, for at least the reason that “an input unit” for, or a step of, “scanning a character handwritten by the user” is missing from the cited prior art, the prior art does not render the presently claimed invention obvious.

The presently claimed invention is patentable over the Browne et al. ‘594 reference for the additional reason that the Browne et al. ‘594 reference does not disclose teach or suggest “a character features extraction section configured to... *compare* the recognized character and the font

character of the basic font,” as recited in independent claim 2, or a step of “*comparing* the recognized character and the font character of the basic font,” as recited in independent claims 8 and 14.

Originally filed claim 2 recited “a character features extraction section configured to... compare the recognized character and the font character of the basic font. In the Examiner’s rejection of originally filed claim 2, the Examiner did not show the existence of a character features extraction unit that is “configured to compare” in the Browne et al. ‘594 reference. As neither “a character features extraction section configured to... *compare* the recognized character and the font character of the basic font,” as recited in independent claim 2, nor a step of “*comparing* the recognized character and the font character of the basic font,” as recited in independent claims 8 and 10, is disclosed, taught or suggested in the Browne et al. ‘594 reference, the Browne et al. ‘594 reference does not render the presently claimed invention obvious for at least this additional reason.

Additionally, the Browne et al. ‘594 reference does not disclose, teach or suggest, “a character features extraction section configured to recognize a character from character data scanned by the input unit, to compare the recognized character and the font character of the basic font, *and* to extract a feature of the handwritten character as the feature parameter,” as recited in independent claim 2. Neither of the cited references discloses a character features extraction section that does *both* of the claimed functions – comparing *and* extracting. Thus, the presently claimed invention is patentable over the cited prior art for at least this additional reason.

Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

2. Claims 2, 8 and 14

The Examiner rejected claims 2, 8 and 14 as being unpatentable over the Browne et al. '594 reference in view of the Syeda et al. '941 patent.

Response

The arguments above with respect to the Browne et al. '594 reference are hereby incorporated by reference. claims 2, 8 and 14, which include the features of claims 1, 7 and 13, respectively, are currently pending. As amended, the rejections to claims 2, 8 and 14 are traversed.

The Syeda et al. '941 patent does not make up for the shortcomings of the Browne et al. '594 reference. The Syeda et al. '941 patent discloses a document system for indexing a two-dimensional pattern in a document. The system disclosed in the Syeda et al. '941 patent allows for handwritten samples to be scanned into a processor. The Syeda et al. '941 patent also discloses a method of generating various fonts based on extracted features of the user-inputted-font (font that is written by hand) using Affine-Transformation.

In contrast to the presently claimed invention, the Syeda et al. '941 patent fails to disclose, teach, or suggest the extraction of features from the user-inputted font using a preliminarily stored handwritten basic font. In particular, the Syeda et al. '941 patent fails to disclose, teach or suggest “a character features extraction section configured to... *compare* the recognized character and the font character of the basic font,” as recited in independent claim 2, or a step of “*comparing* the recognized character and the font character of the basic font, and extracting a feature of the handwritten character as the feature parameter. The character data scanned by the input unit is “a character handwritten by the user,” as recited in claims 2, 8 and 14.

At page 8 of the Office Action, the Examiner points out that “the Syeda et al. '941 patent

teaches the hashed image base points are used to complete candidate poses (e.g. characters);” however, the Syeda et al. ‘941 patent fails to disclose, teach or suggest any kind of comparison between the hashed image base points and the preliminarily stored basic font.

Thus, either alone or in combination with each other, neither the Browne ‘et al. ‘594 reference nor the Syeda et al. ‘914 patent discloses, teaches or suggests, “a character features extraction section configured to... *compare* the recognized character and the font character of the basic font,” as recited in independent claim 2, or a step of “*comparing* the recognized character and the font character of the basic font, and extracting a feature of the handwritten character as the feature parameter,” as recited in independent claims 8 and 14.

In further contrast to the presently claimed invention, the Browne et al. ‘594 reference and the Syeda et al. ‘941 patent both fail to disclose, teach, or suggest the extraction of features from the user-inputted font using a preliminarily stored handwritten basic font. In particular, the Browne et al. ‘594 reference and the Syeda et al. ‘941 patent both fail to disclose, teach or suggest “a character features extraction section configured to... recognize a character from character data scanned by the input unit,” as recited in independent claim 2, or a step of “recognizing a character from character data scanned by the input unit,” as recited in independent claims 8 and 14. The data that is scanned by the input unit is recited in the independent claims as “handwritten.” As the Browne et al. ‘594 reference and the Syeda et al. ‘914 patent do not disclose, teach or suggest “a character features extraction section configured to... recognize a character from character data scanned by the input unit,” as recited in independent claim 2, or a step of “recognizing a character from character data scanned by the input unit,” amended claims 2, 8 and 14 are not rendered obvious by the cited prior art and should be allowed.

Additionally, neither the Browne et al. ‘594 reference nor the Syeda et al. ‘914 patent

discloses, teaches or suggests, “a character features extraction section configured to recognize a character from character data scanned by the input unit, to compare the recognized character and the font character of the basic font, *and* to extract a feature of the handwritten character as the feature parameter,” as recited in independent claim 2. Neither of the cited references discloses a character features extraction section that does *both* of the claimed functions – comparing *and* extracting. Thus, the presently claimed invention is patentable over the cited prior art for at least this additional reason.

Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

3. Claims 3, 9 and 15

The Examiner rejected claims 3, 9 and 15 as being unpatentable over the Browne et al. ‘594 reference in view of the Sims publication.

Response

The arguments above with respect to the Browne et al. ‘594 reference are hereby incorporated by reference. By this Response and Amendment, claims 3, 9 and 15 have been amended to depend from claims 2, 8 and 14, respectively. As amended, the rejections to claims 3, 9 and 15 are traversed.

The Sims publication does not make up for the shortcomings of the Browne et al. ‘594 reference. The Sims publication discloses a technique for creating complex simulated structures. The reference discloses creating a new structure based on an existing structure.

In contrast to the presently claimed invention, the Sims publication fails to disclose, teach, or suggest the extraction of features from the user-inputted font using a preliminarily stored basic font. In particular, the Sims fails to disclose, teach or suggest “a character features extraction

section configured to... *compare* the recognized character and the font character of the basic font,” as recited in independent claim 2, or a step of “*comparing* the recognized character and the font character of the basic font, and extracting a feature of the handwritten character as the feature parameter. The character data scanned by the input unit is “a character handwritten by the user,” as recited in claims 2, 8 and 14.

Thus, either alone or in combination with each other, neither the Browne ‘et al. ‘594 reference nor the Sims publication discloses, teaches or suggests, “a character features extraction section configured to... *compare* the recognized character and the font character of the basic font,” as recited in independent claim 2, or a step of “*comparing* the recognized character and the font character of the basic font, and extracting a feature of the handwritten character as the feature parameter,” as recited in independent claims 8 and 14.

In further contrast to the presently claimed invention, the Browne et al. ‘594 reference and the Sims publication fail to disclose, teach, or suggest the extraction of features from the user-inputted font using a preliminarily stored basic font. In particular, the Browne et al. ‘594 reference and the Sims publication fail to disclose, teach or suggest “a character features extraction section configured to... recognize a character from character data scanned by the input unit,” as recited in independent claim 2, or a step of “*recognizing a character from character data scanned by the input unit*,” as recited in independent claims 8 and 14.

As this feature is not disclosed in the Browne et al. ‘594 reference or the Sims publication, the Browne et al. ‘594 reference and the Sims publication do not render the presently claimed invention obvious. Furthermore, dependent claims 3, 9, and 15 are amended to depend from amended claim 2, thus, amended claims 3, 9 and 15 also should be allowed.

Additionally, neither the Browne et al. ‘594 reference nor the Sims publication discloses,

teaches or suggests, “a character features extraction section configured to recognize a character from character data scanned by the input unit, to compare the recognized character and the font character of the basic font, *and* to extract a feature of the handwritten character as the feature parameter.” Neither of the cited references discloses a character features extraction section that does *both* of the claimed functions – comparing *and* extracting. Thus, the presently claimed invention is patentable over the cited prior art for at least this additional reason.

Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

4. Claims 4, 10 and 16

The Examiner rejected claims 4, 10 and 16 as being unpatentable over the Browne et al. ‘594 reference.

Response

By this Response and Amendment, claims 4, 10 and 16 have been canceled, which renders the rejections thereto moot.

Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

MISCELLANEOUS

Claims 5, 6, 11, 12, 17 and 18 have been indicated as being allowable if rewritten in independent form to include all of the features of their base claims and any intervening claims. Applicant submits that claims 5, 6, 11, 12, 17 and 18 are now allowable as these claims have been rewritten in independent form to include all of the features of their base claims and any

intervening claims as the Examiner suggested.

Accordingly, Applicant respectfully requests that the Examiner allow claims 5, 6, 11, 12, 17 and 18.

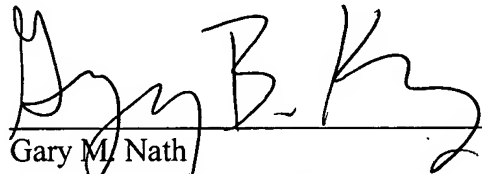
CONCLUSION

In light of the foregoing, Applicant submits that the application is in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicant respectfully requests that the Examiner contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

In the event this paper is not timely filed, Applicant petitions for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

Respectfully submitted,

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Date: April 8, 2005

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